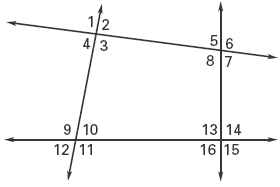
**Homework 12 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Transversals and Parallel Lines Period: \_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

State the relationship between the two angles.

1. ∠3 and ∠9 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. ∠5 and ∠13 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. ∠4 and ∠10 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. ∠5 and ∠15 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. ∠7 and ∠14 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. ∠1 and ∠11 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| 7. Find m∠1 and m∠2. | 8. Find x and y. | 9. Find m∠1 and m∠2. |
| 10. What is the value of x?   * 1. 40   2. 50   3. 60   4. 70 | 11. Find the value of x. | 12. Find the value of x. |
| 11. If lines *a* and *b* in the figure below are parallel, and intersected by the transversal, c, which of the following  statements must be true?     1. *m*1 = *m*7 Justify your response. 2. *m*2 = *m*8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. *m*4 + *m*5 = 180 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. I only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. III only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. I and II only 4. I, II, and III 5. None of the above | | |

**Mixed Review**

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| 1. Which of the following compound inequalities represents the solution set graphed below:    A. *x* ≤ -6 or *x* > -3  B. *x* ≥ -6 and *x* < -3  C. *x* > -6 and *x* < -3  D. *x* ≥ -6 or *x* < -3 | 2. What is the equation of the graph below? | 3. State an ordered pair that would satisfy the equation: |
| 4. Solve for *b.* | 5. What is the slope of the equation 2x + y = 10? | 6. Solve for *r*. |
| Use points *A*(2, 1) and *B*(0, 4) for questions 7 – 12 below. | | |
| 7. Find the slope of the line created by these points. | 8. Write the equation of the line created by these two points in slope-intercept form. | 9. Graph this line. |
| 10. What are the x- and y- intercepts of this line? | 11. What is the distance between A and B? | 12. What is the midpoint of segment *AB*? |